

Making Conservation a Way of Life: Implementing AB 1668 & SB 606

Item 8

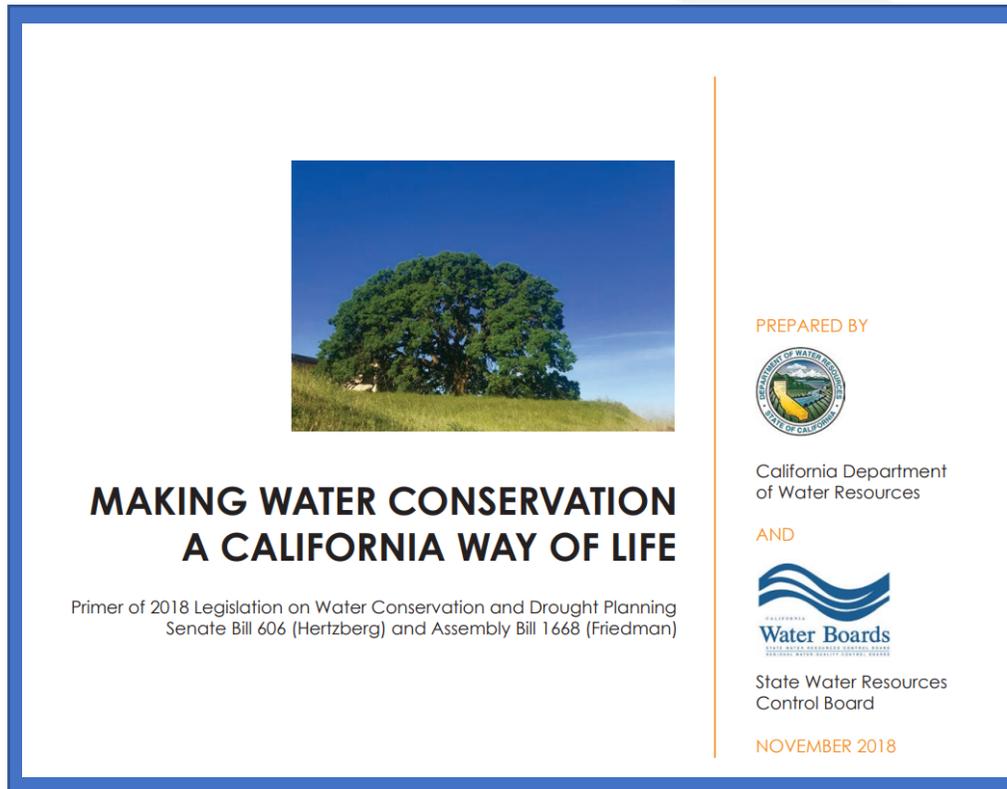


Office of Research, Planning, and Performance

Agenda

- Introduction
- Purpose and overall structure of the proposed regulation
- Outdoor standards (presentation and panel 1)
- Supplier impacts (presentation and panel 2)
- Tools to help Suppliers meet their objectives (presentation and panel 3)
- Panel 4
- Board Member Discussion
- Public comments

Making Conservation a Way of Life



- AB 1668 & SB 606 passed in 2018
- DWR recommendations in Fall 2022
- State Water Board rulemaking in 2023
- Urban Retail Water Suppliers to:
 - Calculate and comply with objectives
 - Carry CII out performance measures
 - Annually report

Urban Retail Water Suppliers

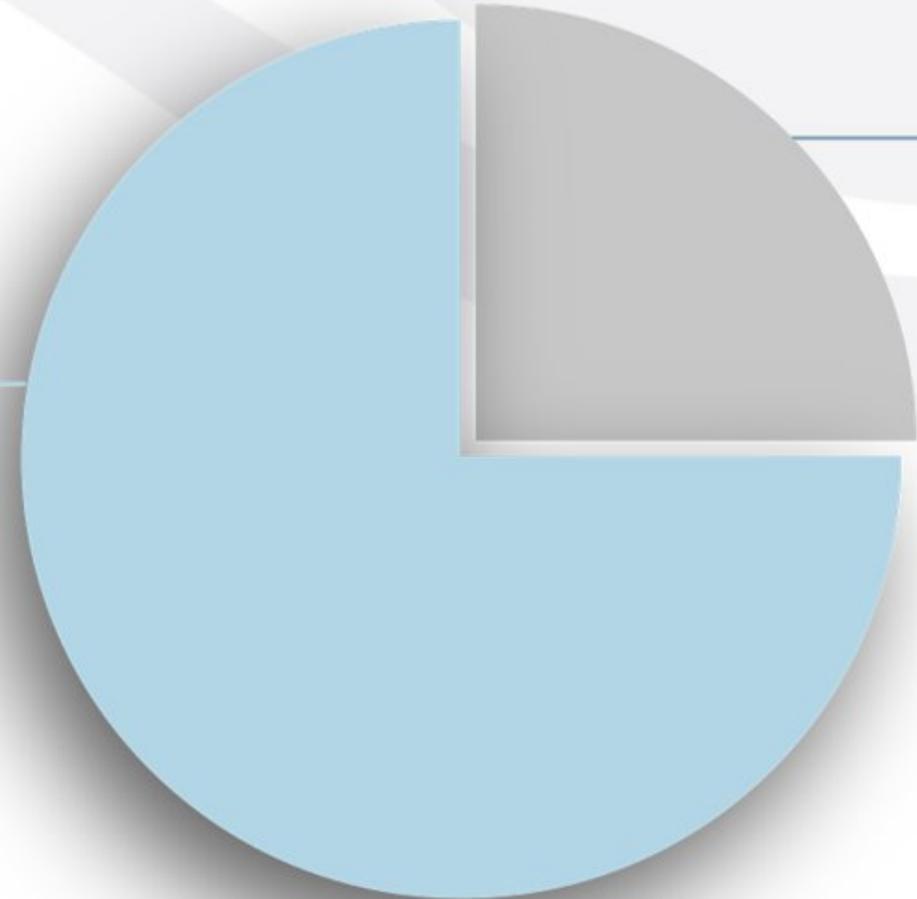
- Households and businesses are **NOT** subject to regulation.
- California's 400 + largest suppliers — not small systems — are.
- These large suppliers
 - Provide water to 95% of CA
 - Range in size and expertise



Urban water uses regulated under the new framework

Included in the Objective

- Residential Indoor Use
- Residential Outdoor Use
- CII Landscapes with DIMs
- Real Water Losses



Excluded from the Objective

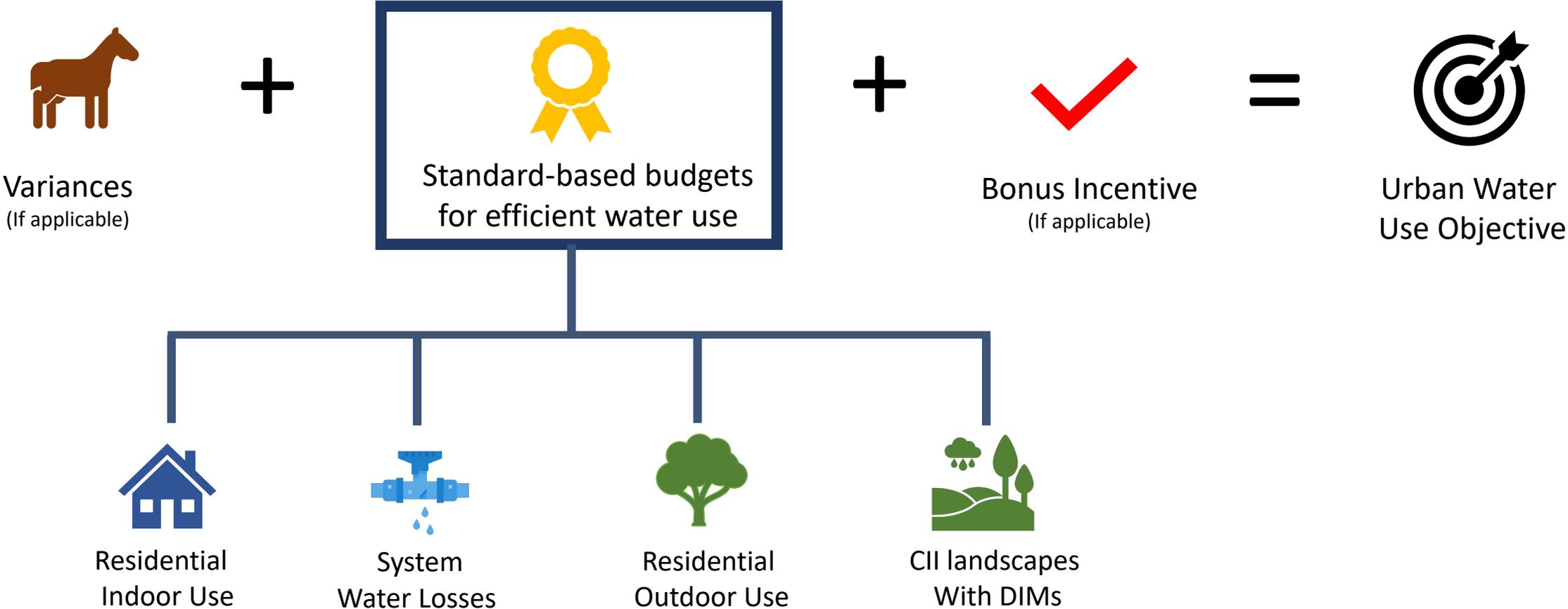
- CII Indoor Use
- CII Outdoor Use, without DIMs
- Other Uses
- Apparent Water Losses

Total Water Use

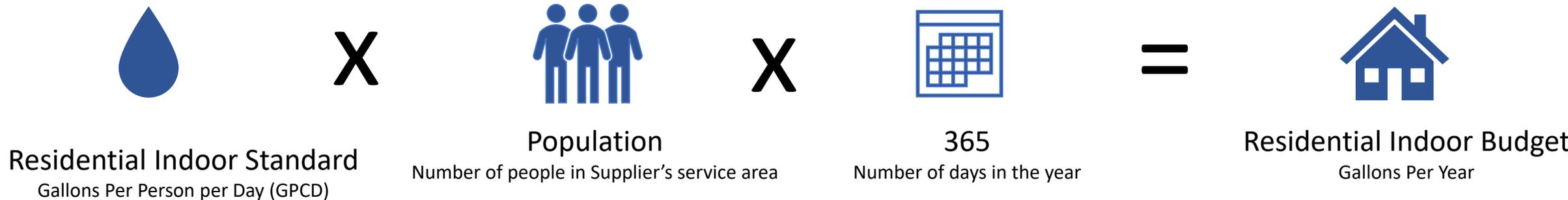
CII = Commercial, Institutional, Industrial
DIMs = Dedicated Irrigation Meters

Basic Formula for Calculating Objectives

To be based on efficiency standards and supplier-specific data



Section 967: Efficient Residential Indoor Budget



Example budget for Res-Indoor Water Use (2019 data)

47 Gallons Per Person per Day × 27,337 people × 365 days =
around 469 million gallons (1,400 AF)

Section 970: Efficient Water Loss Budget



X



X



=



System-Specific Standard

Gallons Per Connection per Day
(or Gallons Per Mile per Day)

Connections (or miles)

Number of connections served by Supplier
(or length of distribution system, in miles)

365

Number of days in the year

Water loss Budget

Gallons Per Year

Example budget for water loss (2019 data)

13.8 Gallons Per Connection per Day × 365 days × 5,646 connections =

around 28 million gallons (87 AF)

Section 968: Efficient Residential Outdoor Budget



X



X



X

0.62

=



Res-Outdoor Standard
Landscape Efficiency Factor

Net ETo
Reference ETo – Effective precipitation
Inches per year

Landscape Area
Square feet of Irrigable Area

Unit Conversion
Factor

Res-Outdoor Budget
Gallons Per Year

Example budget for residential outdoor (2019 data)

0.80 × 76.3 in/year × 14.7 million sq ft × 0.62 =

around 557 million gallons (1,700 AF)

Section 969: Efficient CII landscapes with DIMs Outdoor Budget

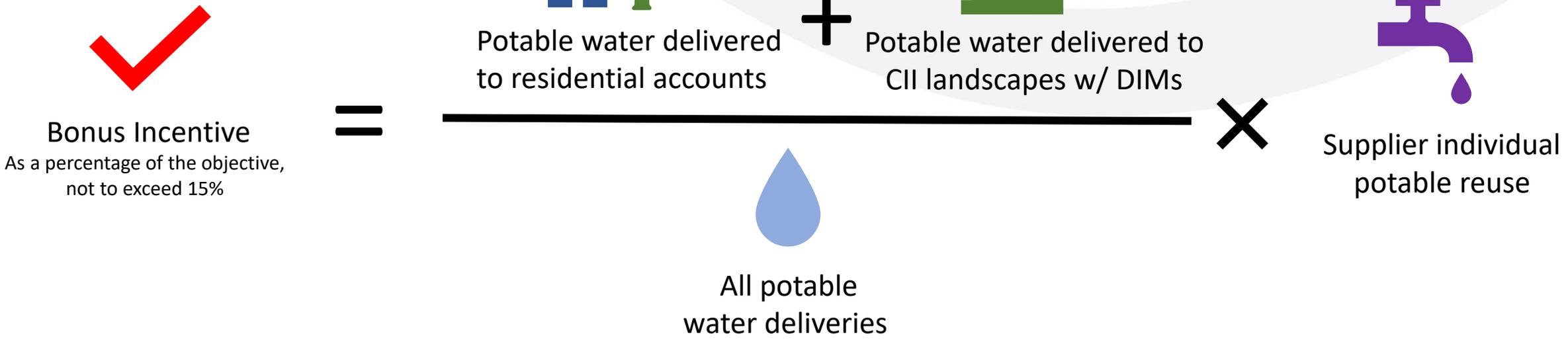


Example budget for CII landscapes with DIMs (2019 data)

$$0.80 \times 76.3 \text{ in/year} \times 200 \text{ thousand sq ft} \times 0.62 =$$

around 8 million gallons (23 AF)

Section 971: Bonus Incentive for Potable Reuse



Variations & Provisions



- **Variations**

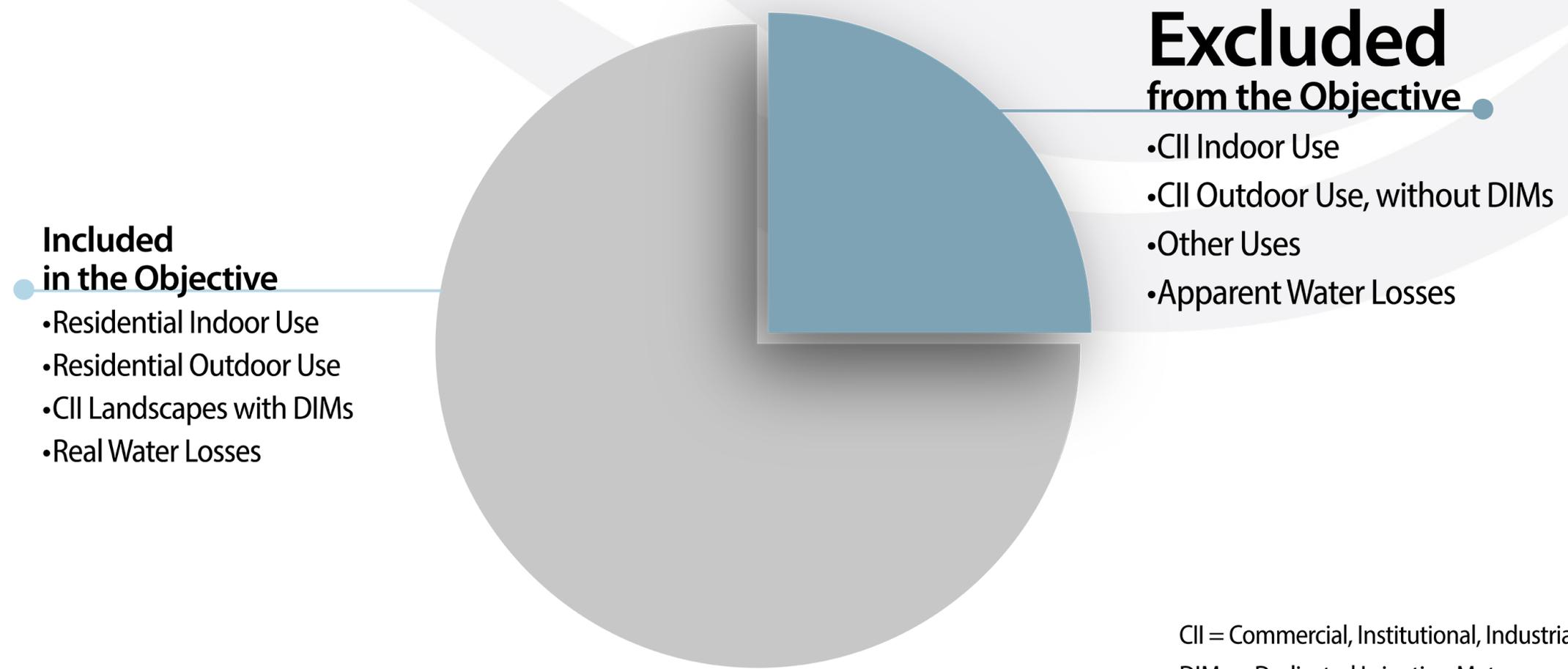
- Unique uses with a material effect
- Threshold of significance

- **Temporary Provisions**

- Uses requiring less water over time
- No threshold of significance



Urban water uses regulated under the new framework

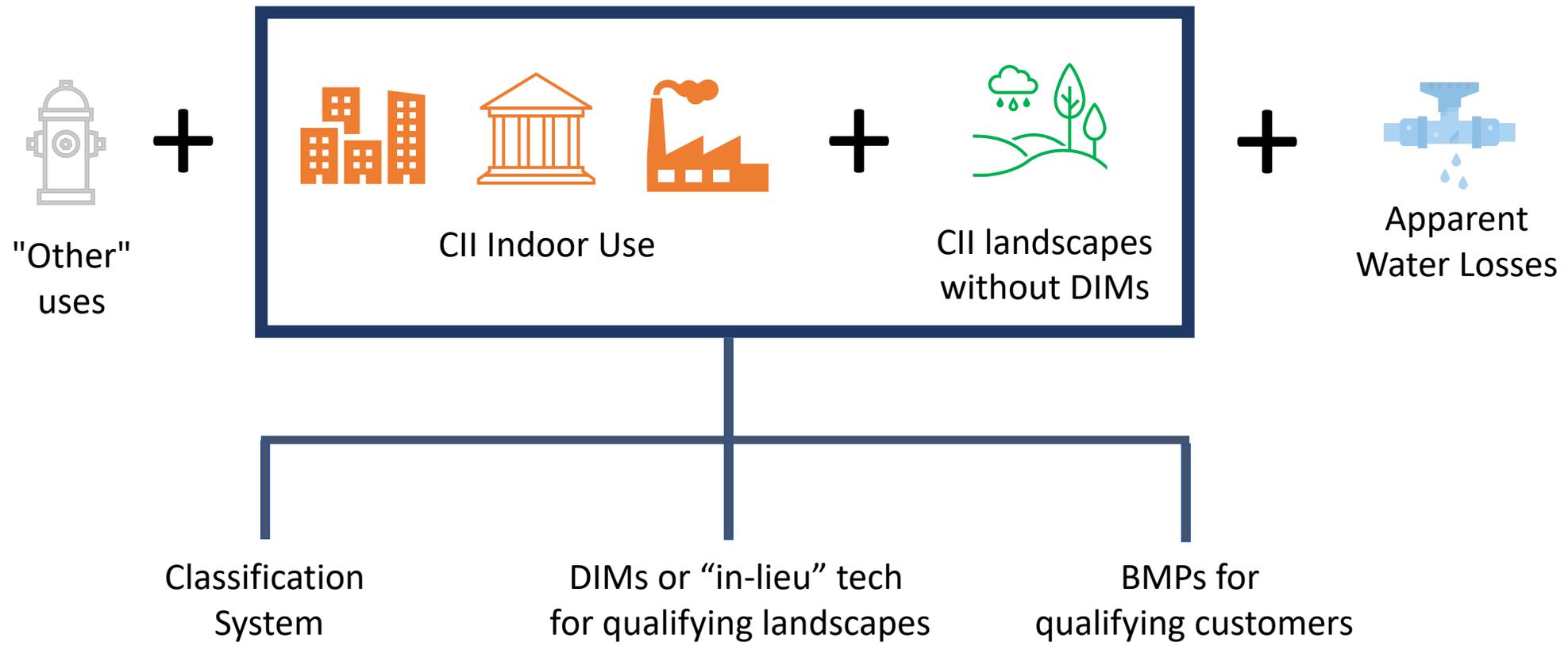


Total Water Use

CII = Commercial, Institutional, Industrial
DIMs = Dedicated Irrigation Meters

Sections 972-974: CII Performance Measures

For CII demands excluded from the urban water use objectives



CII Performance Measure: Proposed Classification system

- Primarily broad categories in U.S. EPA's ENERGYSTAR Portfolio Manager tool
- Aligns with CEC's benchmarking program
- Already in use in California



CII Performance Measure: Proposal for DIMs or “in-lieu” tech for qualifying landscapes

- Threshold to determine which CII landscapes qualify
 - 500,000 gallons annually
- Defining "in-lieu" technologies
 - Hardware, software, actions



Performance Measure

Proposal for Best Management Practices (BMPs)

- Disclosable Buildings
- Top 20% threshold
- Top 2.5% threshold
- Non-functional turf



Compared to DWR's recommendations

Regarding the urban water use objective:

- More ambitious long-term outdoor standards starting in 2035
- Different approach to integrating Irrigable Not Irrigated (INI) Area
- Inclusion of an alternative compliance pathway for suppliers meeting certain criteria

Regarding the CII performance measures:

- A classification system consistent with the CEC's
- Use of a volumetric rather than area threshold for qualifying landscapes
- Additional thresholds and BMPs:
 - Disclosable buildings ---> providing data in a format compatible with ESPM
 - Irrigation of NFT with potable water ---> permanent ban in place by 2025
- Additional BMPs that suppliers may choose from

Changes made since March workshop

- Special landscape areas include **all** areas irrigated with recycled water, including non-functional turf
- Through 2027, suppliers can include up to 20% Irrigable Not Irrigated Area in calculating their residential outdoor budget, if otherwise they wouldn't meet their objective
- Additional performance measure: Each supplier shall ban the irrigation of non-functional turf with potable water on CII landscapes by July 2025
- Alternative compliance pathway for suppliers who must reduce by more than 20% to meet their objective starting in 2035 and meet the additional criteria listed in the draft regulation

Making Conservation a California Way of Life

Continued engagement and conversation



ENGAGING DIVERSE ORGANIZATIONS



GATHERING IN SMALL GROUPS



ASKING BIG QUESTIONS

Submittal of Written Comments

- By email to: **commentletters@waterboards.ca.gov**.
 - The State Water Board requests but does not require that email transmission of comments, particularly those with attachments, contain the regulation package identifier “**Comment Letter—Proposed Making Conservation a California Way of Life Regulation**” in the subject line to facilitate timely identification and review of the comment.
- May also submit via fax transmission, mail, or hand-delivery.

Proposed rulemaking schedule

First public comment period

August 18 – October 17, 2023

Consideration for Adoption

Summer 2024

Rule becomes effective, if adopted

October 1, 2024

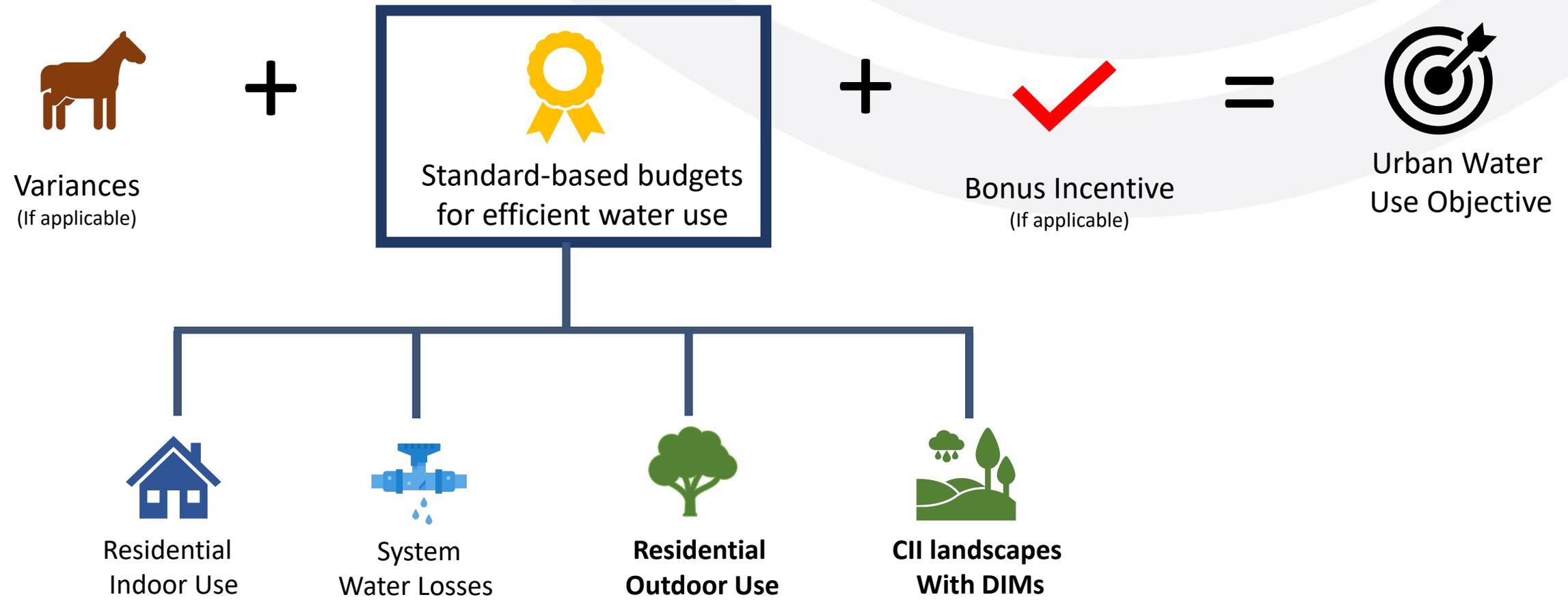
Outdoor standards



Office of Research, Planning, and Performance

Basic Formula for Calculating Objectives

To be based on efficiency standards and supplier-specific data



Efficient Outdoor Budgets: Residential landscapes and CII landscapes with DIMs



0.62



Res- or
CII landscapes w DIMs-
Outdoor Standard
Landscape Efficiency Factor

Net ET
Reference ET – Effective precipitation
Inches per year

Landscape Area
Square feet of Irrigable Area
of Res landscapes or
CII landscapes with DIMs

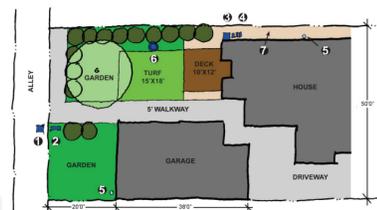
Unit Conversion
Factor

Res- or CII
landscapes with
DIMs-
Outdoor Budget
Gallons Per Year

Outdoor Standards

Statutory Requirements

- Long-term standards for the efficient use of water
- Expressed as Landscape Efficiency Factors
- Incorporate the Principles of the Model Water Efficient Landscape Ordinance, including provisions such as:
 - Evapotranspiration Adjustment Factors
 - Landscape area
 - Maximum applied water allowance
 - Reference evapotranspiration
 - Special landscape areas



	MWELO	New Framework
Application	Design standard	Performance Standard
Factor	Evapotranspiration Adjustment Factor	Landscape Efficiency Factor
Scale	Individual parcel	Supplier's service area
Water Source	Water delivered by a supplier, captured rainwater, graywater, etc.	Water delivered by Suppliers
Landscape Type	Planting areas, turf areas, and water features	"Irrigable lands"

Evapotranspiration Adjustment Factor

$$ETAF = \frac{\text{Plant Factor (PF)}}{\text{Irrigation Efficiency (IE)}}$$

Irrigation Efficiency = DU * IME
 DU = Distribution Uniformity
 IME = Irrigation Management Efficiency

		Irrigation Efficiency					
		Very inefficient (<40%)	Inefficient (40-50%)	Average (65-75%)	Efficient (76-89%)	Very efficient (90-100%)	
Plant Factor	High	100%	250%	200%	133%	112%	100%
	90%	225%	180%	120%	101%	90%	
	80%	200%	160%	107%	90%	80%	
	70%	175%	140%	93%	79%	70%	
	Medium	60%	150%	120%	80%	67%	60%
	50%	125%	100%	67%	56%	50%	
	40%	100%	80%	53%	45%	40%	
	Low	30%	75%	60%	40%	34%	30%
	20%	50%	40%	27%	22%	20%	
	Very low	10%	25%	20%	13%	11%	10%



0.4:

A low water use turf alternative ground cover irrigated with overhead sprays, i.e., a low water-using plant factor (0.3) divided by overhead spray IE (0.75)---
 $0.3/0.75 = 0.4$



0.5:

Quarter of the outdoor space is warm season grass well-irrigated with rotors and the remainder is a mix of medium and low water using plants irrigated with pressure compensating drip.
 $(0.6/0.7)*0.25 + (0.3/0.8)*0.75 = 0.5$



0.97:

Warm season grass well-irrigated with lawn sprinklers
 $0.6/0.62 = 0.97$



0.32

0.49 0.55

0.97

1.14

1.4



0.34:

Native plant garden on drip and micro spray irrigation with majority low and very low water using plants and a few medium water using plants
 $(0.6/0.8)*0.15 + (0.3/0.8)*0.5 + (0.1/0.8)*0.35 = 0.34$



0.55:

Yard is majority low water using plants (PF = 0.3) irrigated with drip (IE = 0.8), a few fruit trees (PF = 0.5) with drip irrigation (IE = 0.8), and a small patch of warm season grass (PF = 0.6) with overhead sprays (IE = 0.75).
 $(0.3/0.8)*0.5 + (0.5/0.8)*0.2 + (0.6/0.75)*0.3 = 0.55$



0.73:

Warm season grass moderately irrigated with efficient rotors
 $0.55/0.75 = 0.73$



1.14:

Cool season grass moderately well-irrigated (e.g., some maintenance, irrigation schedule) with rotors
 $0.8/0.7 = 1.14$

1.4:

Warm season grass inefficiently irrigated (e.g. not properly tuned, running too long) with lawn sprinklers
 $0.6/0.43 = 1.4$

Methods informing DWR's Recommendation

Two approaches: theoretical and empirical

Theoretical/Horticultural

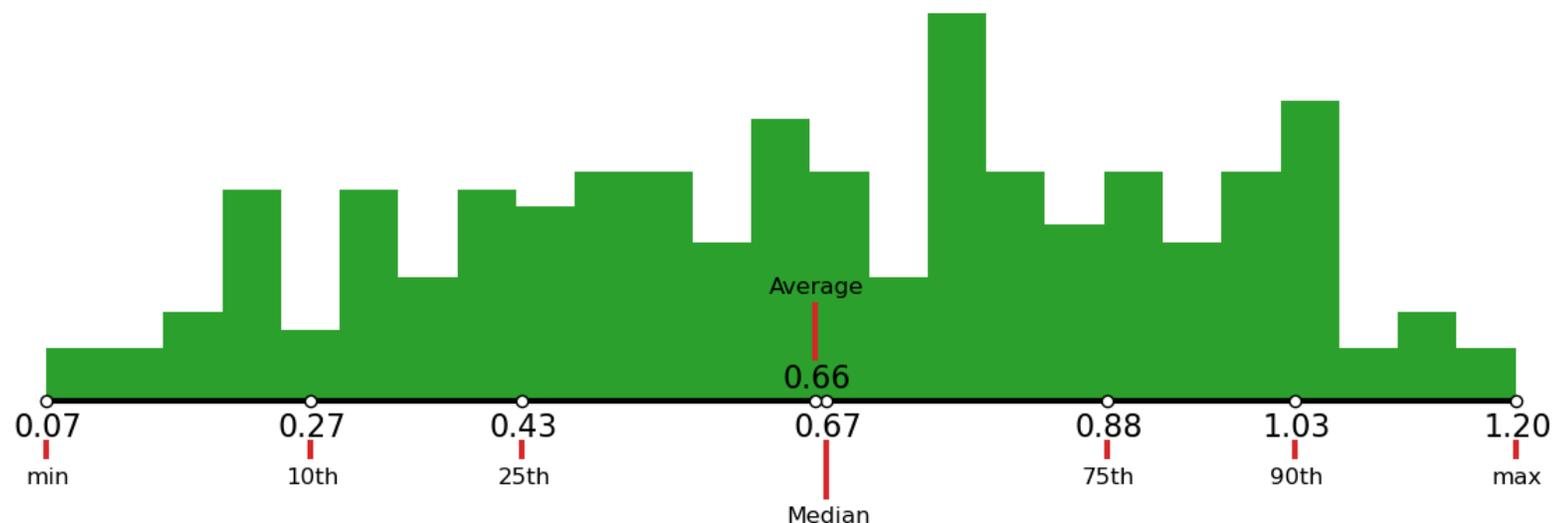
- Estimated canopy & non-canopy area & then assumed:
 - Canopy PF = 0.58
 - Non-canopy PF = 0.70
 - IE = 0.80
- Statewide ETF = 0.76

Empirical

- Calculated unique ETF values based on:
 - Res-Indoor study
 - II & INI area
 - CIMIS & Cal-SIMETAW
- Statewide ETF = 0.60 - 0.66

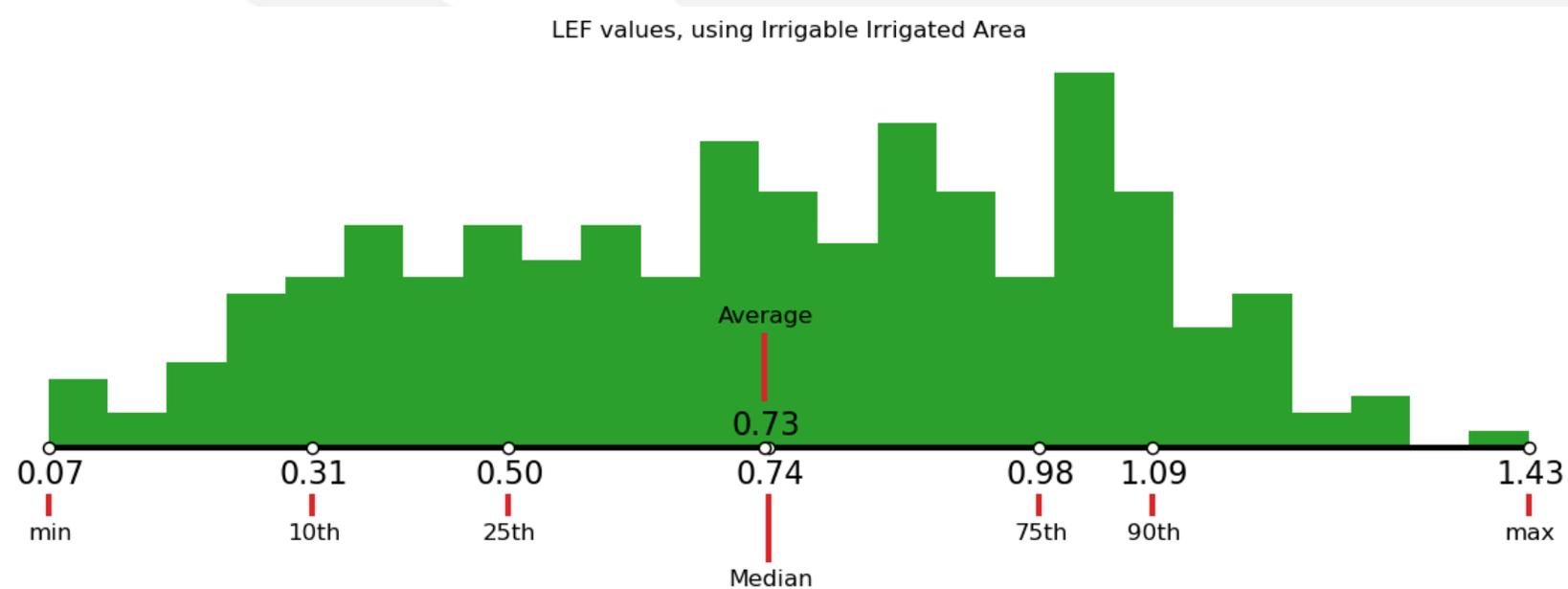
Averaging the empirical methods: Statewide ETF was 0.64 (II + 20% INI)

LEF values, using Irrigable Irrigated Area + 20% Irrigable Not Irrigated Area



	Landscape Area = II			Landscape Area = II + 20% INI		
	ETF Irrigated	ETF Irrigated min/max range: 0.1 - 1.0	ETF Irrigated bottom & top coded: 0.1 - 1.0	ETF Irrigated	ETF Irrigated max range: 0.1 - 1.0	ETF Irrigated bottom & top coded 0.1 - 1.0
Number of URWS	248	188	248	248	210	248
Mean ETF*	0.75	0.62	0.71	0.67	0.60	0.65

Averaging the empirical methods: Statewide ETF was 0.69 (II only)



	Landscape Area = II			Landscape Area = II + 20% INI		
	ETF Irrigated	ETF Irrigated min/max range: 0.1 - 1.0	ETF Irrigated bottom & top coded: 0.1 - 1.0	ETF Irrigated	ETF Irrigated max range: 0.1 - 1.0	ETF Irrigated bottom & top coded 0.1 - 1.0
Number of URWS	248	188	248	248	210	248
Mean ETF*	0.75	0.62	0.71	0.67	0.60	0.65

Residential Outdoor Standard

Staff Proposal

Existing landscapes

Year	Standard	INI Buffer
2020	0.80	Up to 20% until 2027
2030	0.63	0%
2035	0.55	0%
Special Landscape Areas	1.00	NA

Landscapes associated with new construction

Year	Standard	INI Buffer
Any	0.55	NA

Standard for CII landscapes with DIMs

Staff Proposal

Existing landscapes

Year	Standard	INI Buffer
2020	0.80	NA
2030	0.63	NA
2035	0.45	NA
Special Landscape Areas	1.00	NA

Landscapes associated with new construction

Year	Standard	INI Buffer
Any	0.45	NA

Estimated Residential Landscape Efficiency

Year	Residential Landscape Area (sq ft)	ETo (in/yr)	Peff (in/yr)	Total Water Use	Estimated Indoor Water Use (DWR Study)

Estimated Residential Outdoor Water Use			Estimated Residential Landscape Efficiency
GPCD	Gallons	Acre Feet	LEF

Example, intentionally left blank

HCF	Total Cost *			Annual cost as a % of local MHI
	Total Cost (\$/HCF/month)	\$/month	\$/year	
6				
9				
12				
24				

Example, intentionally left blank

Meeting their objective?



Compliance Year	Standard-based efficiency budgets (GPCD)				Urban Water Use Objective (GPCD)	2017-2021 Avg. Use (GPCD)
	Residential Indoor	Residential Outdoor	CII landscapes with DIMs	Real Water Loss		
2024	55					
2025	47					
2027	47					
2030	42					
2035	42					

Example, intentionally left blank

Panel 1

- Nate Adams, Santa Margarita Water District
- Claire Nordlie, City of Santa Rosa
- Cielo Sichi, LandFour Landscape
- Regina Hirsch, Watershed Progressive

Panel Slides Not Available

Panelist slides are not included due to Americans with Disabilities Act web accessibility requirements; however, presentations can be viewed at:

www.waterboards.ca.gov/conservation/framework

Analyzing impacts to Suppliers using provisional data



Office of Research, Planning, and Performance

Data and tools available to the public

- Provisional data release:
 - 2017-2021 reported water use and population, and estimated impacts relative to the provided data
 - Documentation explains calculation steps
- Water Use Objective Exploration Tool
 - Same base data as provisional dataset (2017-2021 reported water use and population)
 - Allows user to explore the impact of indoor and outdoor residential standards (not just proposed standards)
- **Deadline to request changes to provisional data: October 31st, 2023.**
 - Send to orpp-waterconservation@waterboards.ca.gov

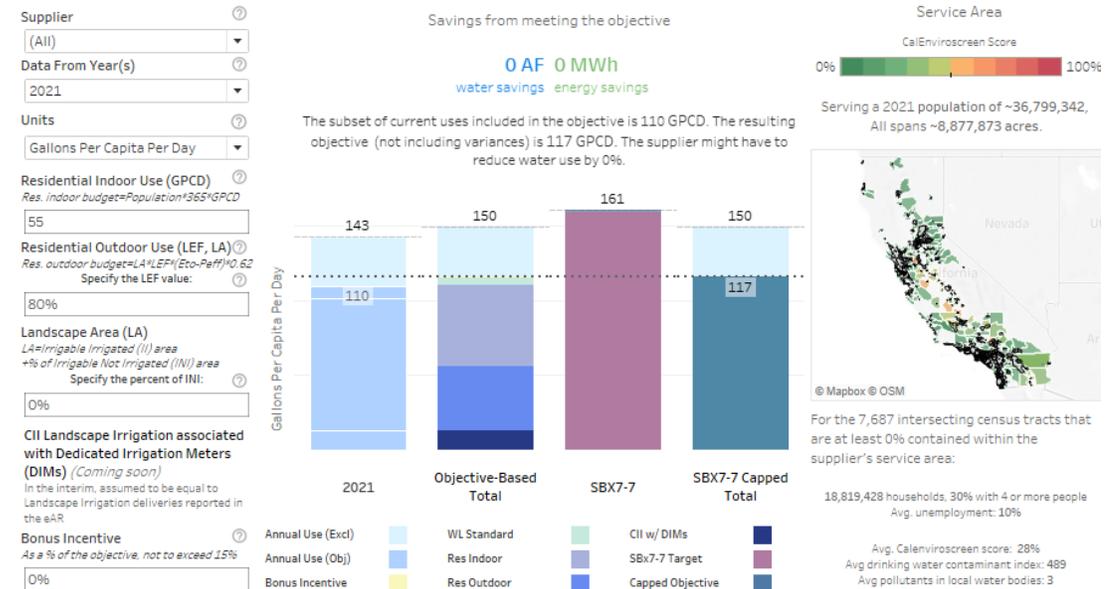
Provisional Data and Examples of Water Use Changes Under Proposed Standards

The Excel file below contains much of the data that is the basis for the Water Use Objective Exploration Tool; the data include 2017-2021 water use data suppliers, as well as residential landscape area measurement and annual evapotranspiration and precipitation data provided by the Department of Water. The accompanying PDF file provides information on the underlying calculations that were performed to produce the budget-based total water use volumes that would result under the various proposed standards for 2025, 2030, and 2035. Please note that these are not the final budget values that suppliers would be subject to under the proposed regulation; they are examples of how calculations would be done.

The accompanying PDF file provides information on the underlying calculations that were performed to produce the budget-based total water use volumes that would result under the various proposed standards for 2025, 2030, and 2035. Please note that these are not the final budget values that suppliers would be subject to under the proposed regulation; they are examples of how calculations would be done.

[Provisional Data Released as Part of Making Conservation a California Way of Life Proposed Regulation \(Version 2.0, 2023-09-13\)](#)

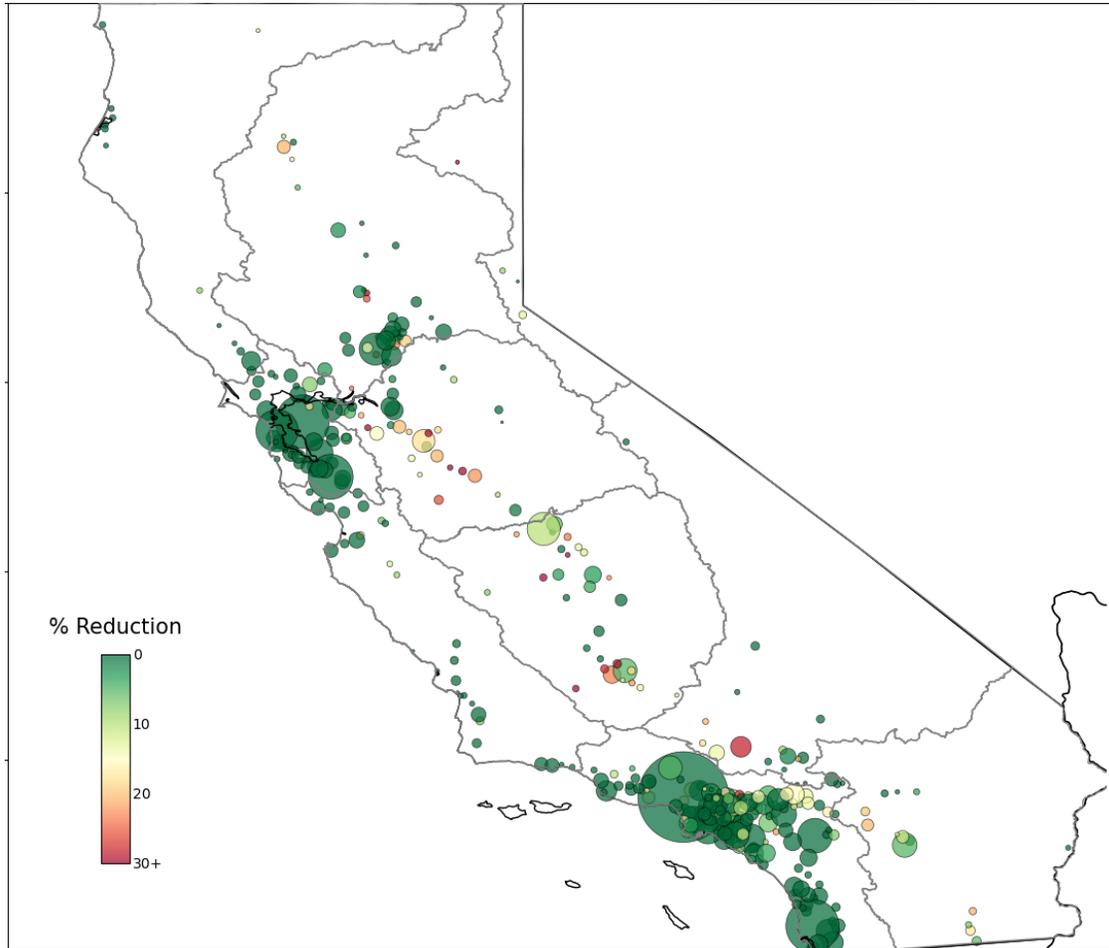
[Documentation for Provisional Data Released as Part of Making Conservation a California Water of Life Proposed Regulation \(Version 1.1, 2023-09-01\)](#)



Data and tool located at <https://waterboards.ca.gov/conservation/water-use-explorer/>

Modeled Possible Impacts of 2025 Standards

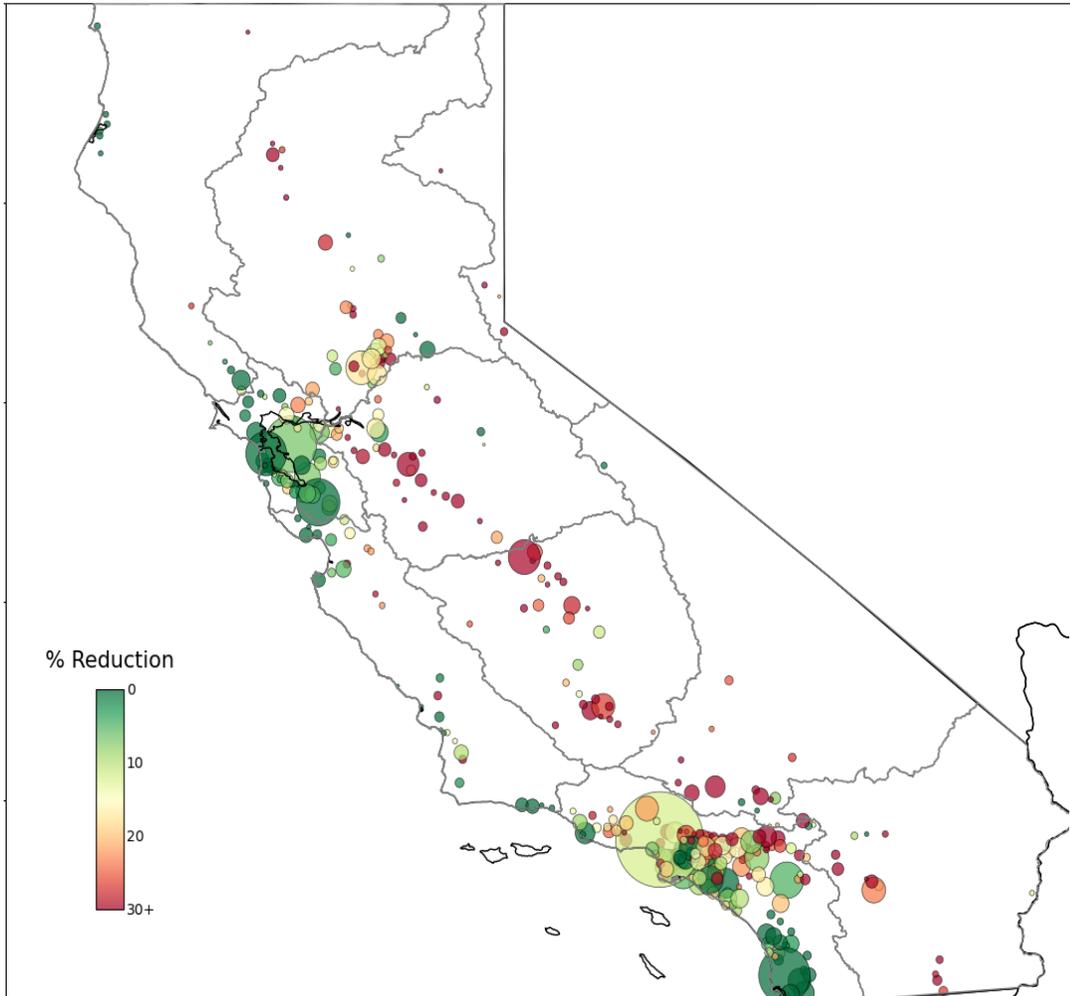
Relative to current use



Reductions needed to meet the objective based on 2025 standards (subset of uses subject to standards)	# of Suppliers	% of Suppliers	Population	% of Population
No Reduction	231	58%	26,890,979	73%
Less Than 5% Reduction	41	10%	2,896,333	8%
5-10% Reduction	37	9%	2,494,468	7%
10-20% Reduction	51	13%	3,012,549	8%
20-30% Reduction	26	7%	1,216,521	3%
Greater Than 30% Reduction	10	3%	204,646	1%
Total	396	100%	36,715,496	100%

Modeled Possible Impacts of 2035 Standards

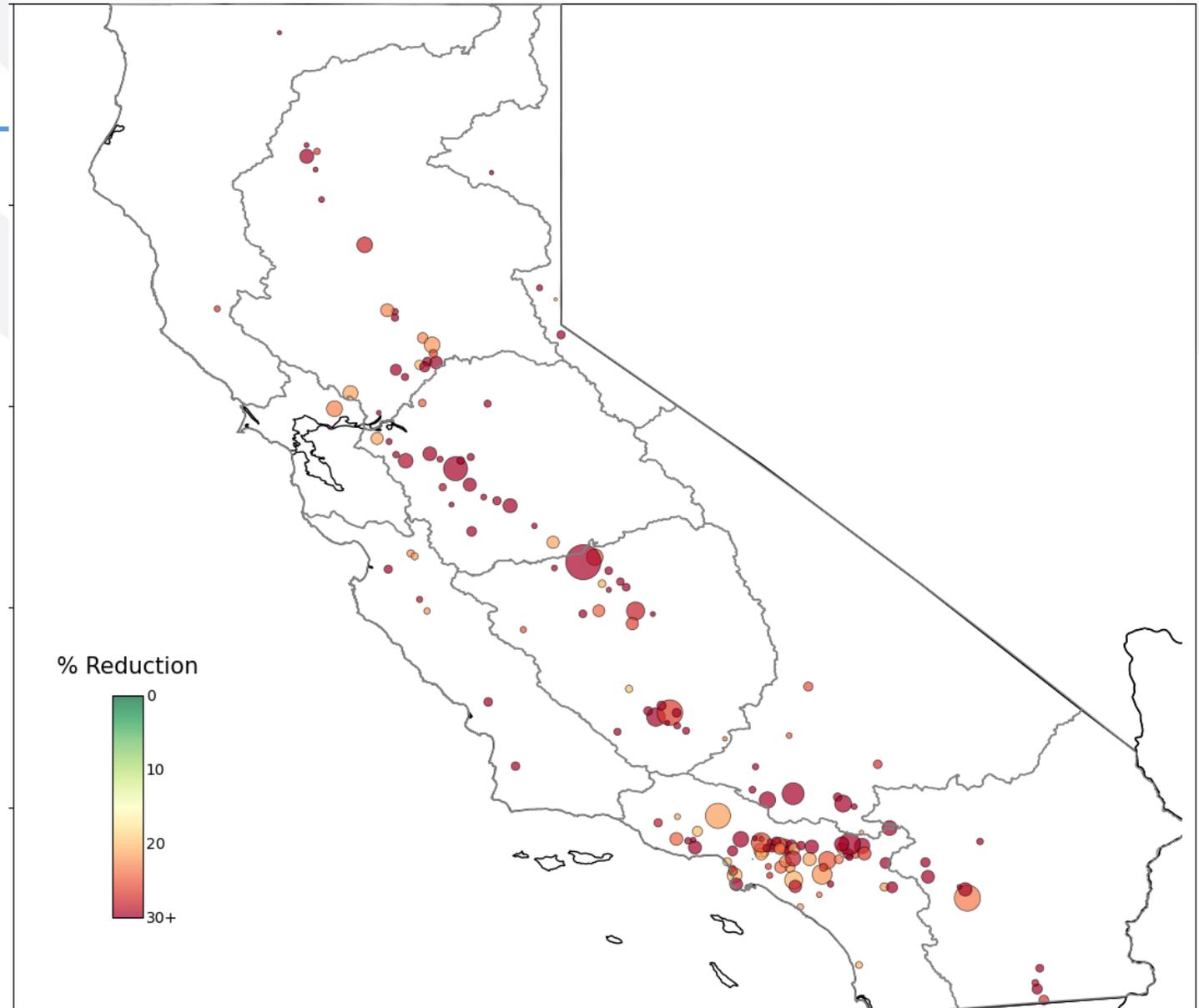
Relative to current use



Reductions needed to meet the objective, based on 2035 standards (subset of uses subject to standards)	# of Suppliers	% of Suppliers	Population	% of Population
No Reduction	71	18%	8,531,243	23%
Less Than 5% Reduction	35	9%	2,748,408	7%
5-10% Reduction	43	11%	5,771,936	16%
10-20% Reduction	82	21%	10,510,866	29%
20-30% Reduction	81	20%	5,404,622	15%
Greater Than 30% Reduction	84	21%	3,748,422	10%
Total	396	100%	36,715,496	100%

Trends for 2035 standards

- Greater reductions tend to be seen with inland suppliers
- Higher impacts again also tend to be associated with smaller agencies

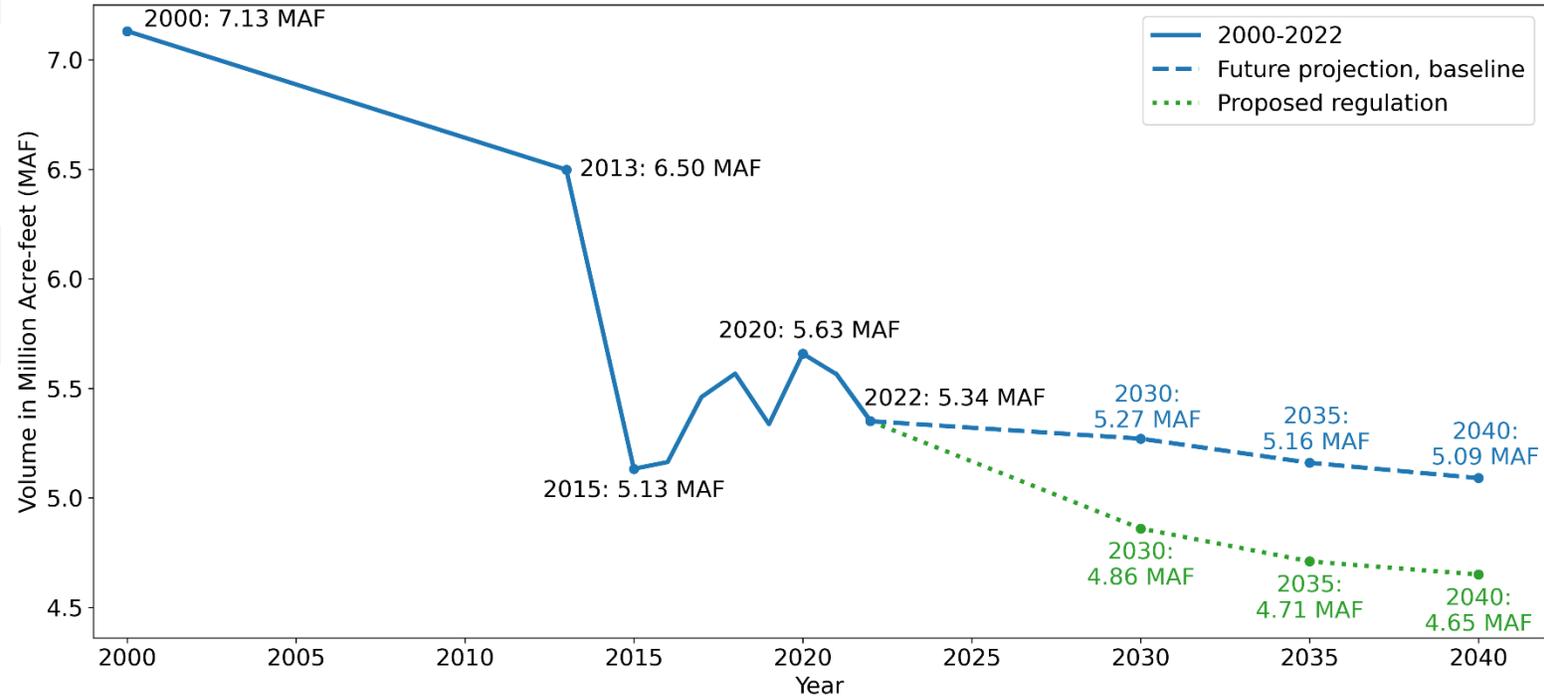


Some Observations

Comparing current use to objectives based on 2035 standards

- *Assuming variances will not be used*, privately-owned suppliers are more likely than other suppliers to meet their objectives without expanding their conservation efforts.
- *Assuming variances will not be used*, the level of conservation effort suppliers may put in for compliance does not seem to be correlated with the demographics—race and median household income—of the communities served.
- *Assuming variances will not be used*, inland suppliers would likely have to expand conservation efforts more than other suppliers.
 - We note that inland suppliers are more likely to serve disadvantaged communities.
- *Assuming variances will not be used*, suppliers with a higher portion of landscaping in turf would likely have to expand conservation efforts.

By 2030, the proposed regulation would save over 400,000 acre-feet of water per year.



Year	Average Annual Savings (AF/year)
2030	413,610
2031	419,570
2032	425,800
2033	432,280
2034	439,000
2035	445,950
2036	444,220
2037	442,700
2038	441,380
2039	440,240
2040	439,280

Panel 2

- Joey Baquerizo, City of Long Beach
- Jennifer Cusack, Hi-Desert Water District
- Jasmine Showers, City of Santa Barbara
- Dawn Calciano, City of Davis

Panel Slides Not Available

Panelist slides are not included due to Americans with Disabilities Act web accessibility requirements; however, presentations can be viewed at:

www.waterboards.ca.gov/conservation/framework

Tools to help Suppliers meet their objectives



Office of Research, Planning, and Performance

- 
- Special Landscape Areas
 - Incorporating Change
 - Variances & Provisions
 - Alternative Compliance
 - Supporting Tree Health

Outdoor Standards: Special Landscape Areas (SLAs)

Existing landscapes

Year	Standard for Residential landscapes	Standard for CII landscapes with DIMs
2020	0.80	0.80
2030	0.63	0.63
2035	0.55	0.45
SLAs	1.00	1.00

Res. Outdoor Standard – SLAs

Comparing to DWR Recommendations

Residential SLAs	Proposed Regulation	DWR Recommendation
Areas with edible plants	✓	✗
Areas irrigated with recycled water	✓	✗



Photo credit: Daily Acts



Photo credit: Santa Margarita Water District

CII landscapes with DIMs –SLAs

Comparing to DWR Recommendations

Landscape Types included as SLAs	Proposed Regulation	DWR Recommendation
Recreational areas	✓	✓
Areas with edible plants	✓	✓
Areas irrigated with recycled water	✓	✓
Bioengineered slopes	✓	✓
Supplemental water for ponds and lakes	✓	✓
Public swimming pools	✓	✓
Cemeteries built before 2015	✓	Excluded from Objective
Existing plant collections, botanical gardens, and arboretums	✓	Excluded from Objective
Registered historic sites	✗	Excluded from Objective
Mined-land reclamation projects	✗	Excluded from Objective
Ecological projects w/o permanent irrigation system	✗	Excluded from Objective

Incorporating Changes in Landscape Area

- Alternative landscape area
 - §968(b)(3) and §969(b)(3)
 - A supplier may use alternative data "if it demonstrates to the Department and the Board that the data are equivalent, or superior, in quality and accuracy to the data provided by the Department."
- Accounting for new construction (10609.2 directive)
 - §968(d) and §969(d) propose integrating data from MWELO reports.
 - Budgets for newly constructed residential landscape area would be based on a LEF of 0.55
 - Folsom reported adding 1.3 million sq ft in 2021 (~24 million gallons)
 - Los Banos reported adding ~500 thousand sq ft in 2021 (~9 million gallons)
 - Budgets for newly constructed CII landscape area would be based on a LEF of 0.45
 - Merced reported adding ~430 thousand sq ft in 2021 (~6 million gallons)
 - Atwater reported adding ~350 thousand sq ft in 2021 (~5 million gallons)

Variations & Provisions

- **Variations**
 - Unique uses with a material effect
 - Threshold of significance
- **Temporary Provisions**
 - Uses requiring less water over time
 - No threshold of significance



Variations

Comparing to DWR Recommendations

	Threshold of Significance	Proposed Regulation	Department Recommendation
Evaporative Coolers	5%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fluctuation in seasonal populations	5% or 1%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Populations of horses & other livestock	5%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Areas irrigated with high TDS recycled water	5% or 1%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water to supplement ponds and lakes to sustain wildlife	0%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water needed to respond to emergency events	5%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dust control on horse corrals or other exercise arenas	5%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water used to irrigate residential-agricultural landscapes	5% or 1%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Examples of Existing Variance Data

- Water used for dust control on horse corrals or other exercise arenas
 - Statewide, an estimated **71 million sq ft.** are unaccounted for in Res-outdoor budgets
 - For example, there are an estimated ~212 thousand sq ft. of horse corrals in Twentynine Palms Water District's service area; that's about ~16% of their estimated Irrigable Irrigated area.
 - For example, there are an estimated ~740 thousand sq ft. of horse corrals in Hi-Desert Water District's service area; that's about ~9% of their estimated Irrigable Irrigated area.
- Water used to irrigate Residential-Agricultural landscapes
 - Statewide, an estimated **2.6 billion sq ft.** are unaccounted for in Res-outdoor budgets
 - For example, there are an estimated ~22 million sq ft. of Res-Ag lands in City of Patterson's service area; that's more than twice their estimated Irrigable Irrigated area.
 - For example, there are an estimated ~22 million sq ft. of Res-Ag lands in California Water Service Company's Stockton system service area; that's about 30% of their estimated Irrigable Irrigated area.

Temporary Provisions

Comparing to DWR Recommendations

	Proposed Regulation	Department Recommendation
Pools and spas	✓	✗
Urban tree health (e.g., establishing climate-ready trees)	✓	✗
Landscapes requiring temporary irrigation (e.g., LID projects)	✓	✗



Desert Willow



Western Redbud



Valley Oak

Proposed Alternative Compliance Pathway

- Starting in 2035, there are two proposed pathways for applying the LEF of 0.63 to both outdoor budgets through 2040:
 - A supplier serving a DAC would be eligible if:
 - Complying with objective would require the supplier to reduce water use by 20% or more
 - The supplier were making annual progress, reducing annual water use by at least 2% per year
 - The supplier was unable to meet its objective because of the outdoor standards
 - A supplier serving non-DACs would be eligible if the supplier:
 - Meets all the criteria above AND
 - Verifies compliance with AWWA's G-480 Standard & the Tree City USA Recognition Program
 - Manages a program dedicated to creating and maintaining climate-ready landscapes

Proposed Alternative Compliance Pathway

- Proposed definition for climate-ready landscapes
 - Landscapes that are "designed and maintained to reduce greenhouse gas emissions and weather more extreme conditions; they save water, reduce waste, nurture soil, sequester carbon, conserve energy, reduce urban heat, protect air and water quality, and create habitat for native plants and pollinators."
- Proposed criteria for program dedicated to creating and maintaining climate-ready landscapes
 - Converting no less than 0.1 percent of turf area/per year
 - Using a rating system to evaluate landscape transformation projects
 - Creating or participating in regional partnerships
 - Dedicated funding, with no less than 40% of funds dedicated to low-income households and DACs within service area
 - At least 1 full-full time staff person

Supporting Practices to Keep Trees Healthy: *Within the Urban Water Use Objective*

- Higher LEF for Special Landscapes Areas
 - Such as recreational areas, existing plant collections, botanical gardens, and arboretums.
- Climate-ready tree provision
 - LEF of 0.85
 - Each new tree = 1 sq ft
- Definition:
 - A tree that is "well-adapted to face both present and future climatic challenges such as heat, drought, extreme weather events, and pests..."
- Variances & provisions contingent upon efforts to prioritize water for trees
- Alternative compliance pathway
 - Tree City USA program
 - Climate ready landscapes program



**Save Our Water
and Our Trees!**

saveourwater.com/trees

Supporting Practices to Keep Trees Healthy: *Within the CII Performance Measures*

- Proposed Tree-focused Best Management Practices
 - Within the "Landscape BMPs" category
 - Programs to decrease urban heat and reduce turf water use by planting trees
 - Within the "Collaboration & Coordination BMPs" category
 - Collaboration with municipal arborists and tree planting organizations to expand and maintain urban forests
- Proposed requirement that supplier ban irrigation of NFT with potable water by 2025
 - Unless "necessary to ensure the health of trees and other perennial, non-turf plantings"



**Save Our Water
and Our Trees!**

saveourwater.com/trees

Funding for Implementation

- SRIA: 2025-2040 projected statewide benefits exceed costs
 - Benefits = \$16.0 billion/Costs = \$13.5 billion
- Limited funding dedicated to water conservation
 - U.S. Bureau of Reclamation's Water and Energy Efficiency Grants
 - For FY 2023, 32 California projects to receive \$46.7 million in funding
- Funding for programs that support multi-benefit projects
 - CSD's Low Income Home Energy Assistance Program
 - Cal-Fire's Urban and Community Forestry Program
 - Cal-Recycle's Community Composting Program
 - OPR's Adaptation Planning Grant Program

Panel 3

- Ken Jenkins, California Water Service
- Shelly Thomsen, South Tahoe Public Utilities District
- Susan Longville, San Bernardino Valley Municipal Water District

Panel Slides Not Available

Panelist slides are not included due to Americans with Disabilities Act web accessibility requirements; however, presentations can be viewed at:

www.waterboards.ca.gov/conservation/framework

Final Panel

Perspectives on the Proposed Regulation



Office of Research, Planning, and Performance

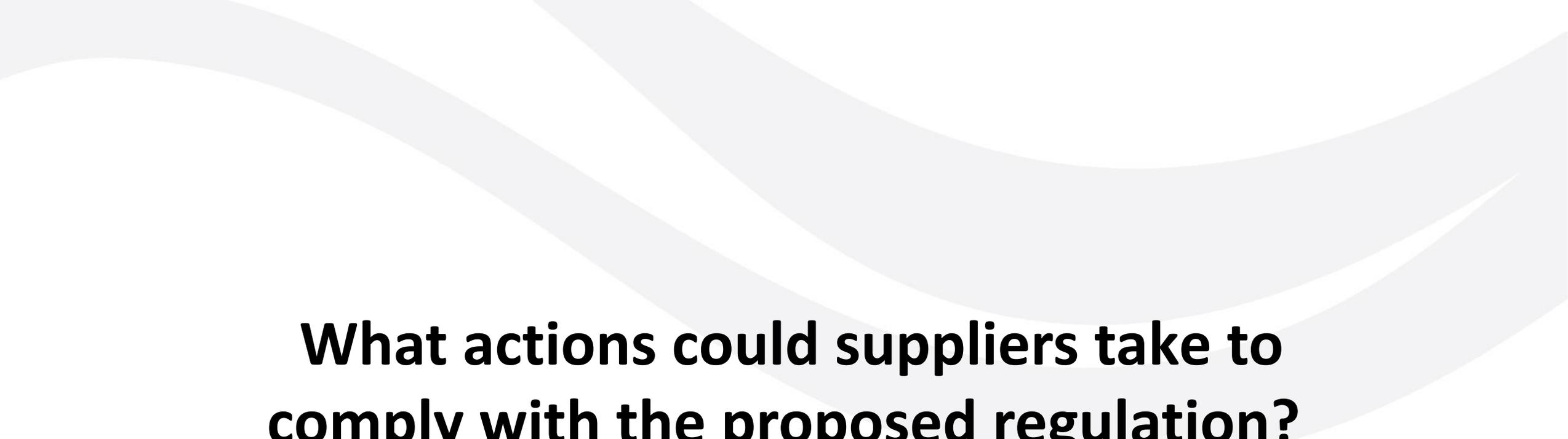
Panel 4

- Fiona Sanchez, Irvine Ranch Water District
- Drew Atwater, Moulton Niguel Water District
- Heather Cooley, Pacific Institute
- Tracy Quinn, Heal the Bay
- Jay Lund, Director of UC Davis Center for Watershed Sciences

**Should the regulation be more or less flexible? If so, in which sections and how?
Will suppliers be able to take advantage of the flexibility as proposed?**

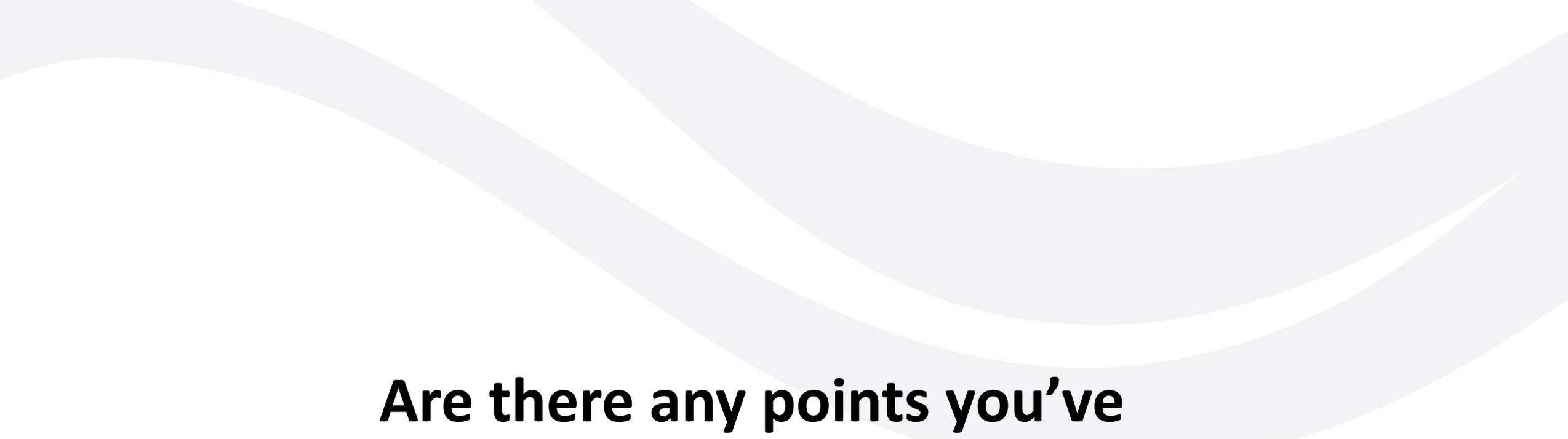


**What are the implications of
the regulatory flexibility (or
lack thereof)?**



**What actions could suppliers take to
comply with the proposed regulation?
Will reasonable actions be enough?**

**What additional resources or support
may be needed to comply with the
proposed regulation and avoid
unintended consequences?**



**Are there any points you've
heard today that you would
like to respond to?**

Corrections made by Staff to this presentation

Slide 8: 1) Section “670” changed to 970 to reflect correct reference to Proposed Text of Regulation. 2) Added definition for length of system.

Slide 33: INI timeline corrected to reflect information in the Proposed Text of Regulation

Slide 52: Updated missing quoted regulation text under Alternative Landscape Area